

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A screening method for a somatic cell nuclear reprogramming substance, which comprises the following steps (a) to (c): ~~and (b)~~:
 - (a) a step for bringing into contact with each other a somatic cell comprising a gene wherein a marker gene is present at a position permitting expression control by the expression control region of an ECAT gene, and a test substance,
 - (b) a step following the aforementioned step (a), for determining the presence or absence of the emergence of cells expressing the marker gene, and
 - (c) a step for selecting a test substance allowing the emergence of the cells as a somatic cell nuclear reprogramming substance candidate.
2. (Currently Amended) The screening method of claim 1, wherein the ECAT gene is one or more genes selected from among the ECAT1 gene comprising the nucleotide sequence of SEQ ID NO: 1 or 3, ECAT2 gene comprising the nucleotide sequence of SEQ ID NO: 5 or 7, ECAT3 gene, ECAT4 gene, ECAT5 gene, ECAT6 gene comprising the nucleotide sequence of SEQ ID NO: 21, ECAT7 gene comprising the nucleotide sequence of SEQ ID NO: 23 or 25, ECAT8 gene comprising the nucleotide sequence of SEQ ID NO: 27 or 29, ECAT9 gene comprising the nucleotide sequence of SEQ ID NO: 31 or 33, and Oct3/4 gene.
3. (Previously Presented) The screening method of claim 1, wherein the marker gene is a drug resistance gene, a fluorescent protein gene, a luminescent enzyme gene, a chromogenic enzyme gene or a gene comprising a combination thereof.
4. (Previously Presented) The screening method of claim 1, wherein the somatic cell is a somatic cell comprising a gene resulting from knocking in the marker gene to the ECAT gene.

5. (Original) The screening method of claim 4, wherein the somatic cell is a somatic cell homozygously comprising the gene resulting from knocking in the marker gene to the ECAT gene.

6. (Currently Amended) The screening method of claim 4, wherein the ECAT gene is one or more genes selected from among the-ECAT1 gene comprising the nucleotide sequence of SEQ ID NO: 1 or 3, ECAT2 gene comprising the nucleotide sequence of SEQ ID NO: 5 or 7, ECAT3 gene, ECAT4 gene, ECAT5 gene, ECAT6 gene comprising the nucleotide sequence of SEQ ID NO: 21, ECAT7 gene comprising the nucleotide sequence of SEQ ID NO: 23 or 25, ECAT8 gene comprising the nucleotide sequence of SEQ ID NO: 27 or 29, ECAT9 gene comprising the nucleotide sequence of SEQ ID NO: 31 or 33, and Oct3/4 gene.

7. (Currently Amended) The screening method of claim 1, which comprises the following steps (a) to (c): and ~~(b)~~:

(a) a step for bringing into contact with each other a somatic cell comprising a gene resulting from knocking in a gene comprising a drug resistance gene to the ECAT2 gene comprising the nucleotide sequence of SEQ ID NO: 5 or 7, and a test substance,

(b) a step following the aforementioned step (a), for determining the presence or absence of surviving cells in a selection medium, and

(c) a step for selecting a test substance allowing the emergence of the surviving cells as a somatic cell nuclear reprogramming substance candidate.

8. (Currently Amended) The screening method of claim 1, which comprises the following steps (a) to (c): and ~~(b)~~:

(a) a step for bringing into contact with each other a somatic cell comprising a gene resulting from knocking in a gene comprising a drug resistance gene to the ECAT3 gene, and a test substance,

(b) a step following the aforementioned step (a), for determining the presence or absence of surviving cells in a selection medium, and

(c) a step for selecting a test substance allowing the emergence of the surviving cells as a somatic cell nuclear reprogramming substance candidate.

9. (Currently Amended) The screening method of claim 1, which comprises the following steps (a) to (c): ~~and (b)~~:

(a) a step for bringing into contact with each other a somatic cell comprising a gene resulting from knocking in a gene comprising a drug resistance gene to the ECAT5 gene, and a test substance,

(b) a step following the aforementioned step (a), for determining the presence or absence of surviving cells in a selection medium, and

(c) a step for selecting a test substance allowing the emergence of the surviving cells as a somatic cell nuclear reprogramming substance candidate.

10. (Currently Amended) The screening method of claim 1, which comprises the following steps (a) to (c): ~~and (b)~~:

(a) a step for bringing into contact with each other a somatic cell comprising genes resulting from knocking in a gene comprising a drug resistance gene to each of the ECAT2 gene comprising the nucleotide sequence of SEQ ID NO: 5 or 7 and the ECAT3 gene, and a test substance,

(b) a step following the aforementioned step (a), for determining the presence or absence of surviving cells in a selection medium, and

(c) a step for selecting a test substance allowing the emergence of the surviving cells as a somatic cell nuclear reprogramming substance candidate.

11. (Currently Amended) The screening method of claim 10, wherein the different drug resistance genes have been knocked in to the ECAT2 gene comprising the nucleotide sequence of SEQ ID NO: 5 or 7 and the ECAT3 gene.

12. (Currently Amended) The screening method of claim 7, wherein the somatic cell is a somatic cell homozygously comprising a gene resulting from knocking in a gene comprising a drug resistance gene to ~~an ECAT~~ the ECAT2 gene comprising the nucleotide sequence of SEQ ID NO: 5 or 7.

13. (Currently Amended) The screening method of claim 1, which comprises the following steps (a) to (c): ~~and (b)~~:

(a) a step for bringing into contact with each other a somatic cell comprising a gene resulting from knocking in a gene comprising a drug resistance gene to the ECAT4 gene, and a test substance,

(b) a step following the aforementioned step (a), for determining the presence or absence of surviving cells in a selection medium, and

(c) a step for selecting a test substance allowing the emergence of the surviving cells as a somatic cell nuclear reprogramming substance candidate.

14. (Original) The screening method of claim 13, wherein the somatic cell is a somatic cell heterozygously comprising a gene resulting from knocking in a gene comprising a drug resistance gene to the ECAT4 gene.

15. (Currently Amended) The screening method of claim 13, which comprises the following steps (a) to (c): and ~~(b)~~:

(a) a step for supplying ECAT4 to a somatic cell comprising a gene resulting from knocking in a gene comprising a drug resistance gene to the ECAT4 gene, and bringing it into contact with a test substance,

(b) a step following the aforementioned step (a), for determining the presence or absence of surviving cells in a selection medium, and

(c) a step for selecting a test substance allowing the emergence of the surviving cells as a somatic cell nuclear reprogramming substance candidate.

16. (Original) The screening method of claim 15, wherein the somatic cell is a somatic cell homozygously comprising a gene resulting from knocking in a gene comprising a drug resistance gene to the ECAT4 gene.

17.-21. (Canceled)

22. (Previously Presented) The screening method of claim 1, wherein the source of the somatic cell is a knock-in mouse comprising a gene resulting from knocking in a marker gene to an ECAT gene.

23. (Previously Presented) The screening method of claim 22, wherein the knock-in mouse is a knock-in mouse homozygously comprising a gene resulting from knocking in a marker gene to an ECAT gene.

24. (Currently Amended) The screening method of claim 22, wherein the ECAT gene is one or more genes selected from among the ECAT1 gene comprising the nucleotide sequence of SEQ ID NO: 1 or 3, ECAT2 gene comprising the nucleotide sequence of SEQ ID NO: 5 or 7, ECAT3 gene, ECAT4 gene, ECAT5 gene, ECAT6 gene comprising the nucleotide sequence of SEQ ID NO: 21, ECAT7 gene comprising the nucleotide sequence of SEQ ID NO: 23 or 25, ECAT8 gene comprising the nucleotide sequence of SEQ ID NO: 27 or 29, ECAT9 gene comprising the nucleotide sequence of SEQ ID NO: 31 or 33, and Oct3/4 gene.

25. (Previously Presented) The screening method of claim 22, wherein the marker gene is a drug resistance gene, a fluorescent protein gene, a luminescent enzyme gene, a chromogenic enzyme gene or a gene comprising a combination thereof.

26.-70. (Canceled)